

Appln. Serial No. 10/086,023
Amendment dated April 18, 2007
Reply to Office Action Mailed February 23, 2007

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REMARKS

In the Office Action dated February 23, 2007, claims 1, 4-6, 14, 23, 24, 39, 41, 44, and 51 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,831,571 (Bartel); claims 67-69 were rejected under § 103 over Bartel in view of U.S. Patent No. 6,917,611 (Dorenbosch); claim 3 was rejected under § 103 over Bartel in view of WO 01/63804 (Haase); claims 7, 28, and 29 were rejected under § 103 over Bartel alone; claims 2, 10, 40, 45, 46, and 49 were rejected under § 103 over U.S. Patent No. 5,172,112 (Jennings) in view of Dorenbosch; claims 8, 9, and 43 were rejected under § 103 over Jennings in view of Dorenbosch and Haase; and claims 11, 16-22, 47, and 48 were rejected under § 103 over Jennings in view of Dorenbosch and U.S. Patent No. 6,192,980 (Tubel).

Applicant acknowledges the allowance of claims 33, 56, and 58-66.

Claims 39, 41, and 42 have been cancelled, without prejudice.

INDEPENDENT CLAIMS 1, 44, 51

It is respectfully submitted that independent claim 1 is not anticipated by Bartel. The Office Action cited units 112A-112C depicted in Fig. 7 of Bartel as being the plurality of wireless network devices to communicate wirelessly using a protocol that defines short-range wireless communication. Specifically, the Office Action cited to column 6, lines 35-41, of Bartel, which refers to coupling the data dump probe 130 to an LWD tool 112 using an optical connection. The Office Action asserted that an optical connection is a short-range wireless communication protocol. 2/23/2007 Office Action at 2.

It is noted that Bartel fails to disclose a plurality of wireless network devices *in the wellbore* to communicate wirelessly using a protocol that defines short-range wireless communication. As discussed by Bartel, a drilling operation performed with a drill string 110 having logging devices 112 is discussed starting in column 6 at line 55. The drill string with the one or more logging devices is lowered into a wellbore to begin the drilling operation. Bartel, 6:55-58. As the drilling operation proceeds, each logging device performs its respective logging function. *Id.*, 6:58-59. After the drilling is completed, the drill string is retrieved to the surface, and as the first logging device is raised to be positioned above a drilling table 116 (above an earth surface), a first data download device 130A is connected to a connection port on the first

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logging device to download data from the corresponding logging device 112. *Id.*, 6:64-7:1. When the drill string is further raised and the second logging device is raised above the drilling table, a second data download device 130B is connected to the second logging device. *Id.*, 7:1-4. This is repeated with each sequential raising of the drill string.

After the data downloads are completed, the sequence of attaching the multiple data download devices is reversed and each device is removed as the drill string is lowered back into the wellbore. *Id.*, 7:34-37. After each data download device is removed, the devices are physically transported to a location at or near the surface computer 118 where each data download device 130 is coupled to the surface computer so that the logging data contained therein can be transferred to the surface computer 118. *Id.*, 7:37-42. Thus, it is clear that any optical connection between the data dump probes 130 and the logging devices 112 is performed after the logging devices are retrieved to the earth surface. In other words, since the optical communication occurs above the earth surface, it is impossible for the devices 112A-112C *in the wellbore* to communicate wirelessly using a protocol that defines short-range wireless communication.

In view of the foregoing, it is clear that claim 1 is not anticipated by Bartel.

Claim 44 (which depended from former claim 39) has been amended from dependent form to independent form, with the scope of the claim remaining *unchanged*. Claim 44 was also rejected as being anticipated by Bartel. With respect to claim 44, Bartel clearly does not disclose telemetering data *from the wellbore* to a position outside the wellbore using at least one of the wireless network devices. As discussed above in connection with claim 1, Bartel teaches that its logging devices have to be retrieved to the earth surface before the data dump devices 130 can communicate with the logging devices. Therefore, Bartel clearly does not disclose telemetering data *from the wellbore* to a position outside of the wellbore using at least one of the wireless network devices.

Independent claim 51 is also allowable over Bartel, which fails to disclose a first device positioned in the wellbore, a second device remotely located with respect to the first device, and means for transferring data between the first device (positioned in the wellbore), and a second device using short-range wireless communication operating without the need for a central

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network. In contrast, Bartel requires that the devices be retrieved to the earth surface before wireless communication can be performed.

Claims dependent from claim 1 are allowable for at least the same reasons as corresponding independent claims. In view of the allowability of base claim 1 over Bartel, it is respectfully submitted that the obviousness rejections of dependent claims based on Bartel (either alone or in combination with another reference) have also been overcome.

With respect to dependent claims 28 and 29, the Examiner took "Official Notice" that positioning a third wireless network device inside the casing of the wellbore so that the first wireless network device can relay information between the second wireless network device and the third wireless network device "has been commonly known and applied so that data can be relayed/repeated." 2/23/2007 Office Action at 5. Applicant respectfully traverses the taking of Official Notice in this context. Claim 28, which depends from claim 23 (which in turn depends from claim 1), recites a first wireless network device positioned outside a tubing in the wellbore, a second wireless network device positioned inside the tubing of the wellbore, and a third wireless network device positioned inside the casing of the wellbore. Claim 28 further recites that the first, second, and third wireless network devices are adapted to communicate wirelessly with one another. There is no suggestion anywhere in Bartel, or in any objective evidence of record, of modifying Bartel to provide the first, second, and third wireless network devices (positioned outside a tubing, positioned inside the tubing, and positioned inside a casing) that are adapted to communicate wirelessly with one another. In fact, Bartel teaches that the logging devices have to be first retrieved to the earth surface before the data dump devices 130 can be provided to communicate with the logging devices at the earth surface. There is no suggestion in Bartel of the subject matter of claim 28. If objective evidence exists that provides the requisite suggestion to modify Bartel to achieve the subject matter of claim 28, Applicant respectfully requests the production of such evidence. Otherwise, a *prima facie* case of obviousness has clearly not been established with respect to claims 28 and 29.

INDEPENDENT CLAIMS 2, 40

Independent claim 2 was rejected as being obvious over Jennings and Dorenbosch.

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The Office Action conceded that Jennings does not disclose using a Bluetooth wireless communication protocol. 2/23/2007 Office Action at 6. However, the Office Action cited Dorenbosch as disclosing the subject matter missing from Jennings. *Id.*

It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 2 for at least the reason that no motivation or suggestion existed to combine the teachings of Jennings and Dorenbosch. See M.P.E.P. § 2143 (8th ed., Rev. 5), at 2100-126. Note that Jennings (like Bartel) relates to using optical communication *at a wellhead*. In contrast, Dorenbosch relates to a *mobile communications network* that has a mobile station with an interface that can comprise a short-range wireless device including Bluetooth. It is respectfully submitted that no suggestion existed in the teachings of Dorenbosch to apply techniques for a mobile station in a mobile communications network to the wellhead environment disclosed by Jennings.

The teachings in Dorenbosch relate to a Bluetooth device used as a user interface device, such as a headset, a mouse, and a track ball for a mobile station 100. Dorenbosch, 1:37-61. There is absolutely no suggestion by Dorenbosch that its Bluetooth user interface device can be desirably used in a wellbore environment.

The only basis for the combination of Jennings and Dorenbosch is impermissible hindsight that benefits from the teachings of the present invention. This is strictly prohibited. See *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988) ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."); *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) (holding that it is impermissible to use the claimed invention as an instruction manual or template to piece together teachings of the prior art to render obvious the claimed invention).

There is no suggestion anywhere of any desirability to use Bluetooth in the wellhead context of Jennings. See *In re Fritch*, 972 F.2d 1266 ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the *desirability* of the modification.") (emphasis added). Therefore, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 2.

Independent claim 40 is similarly allowable over Jennings and Dorenbosch.

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INDEPENDENT CLAIM 68

Claim 68 (which depends from former claim 39) has been amended from dependent form to independent form, with the scope of the claim remaining *unchanged*. Claim 68 was rejected as being obvious over Bartel in view of Dorenbosch. It is respectfully submitted that no motivation or suggestion existed to combine the teachings of Bartel and Dorenbosch, for reasons similar to those provided above with respect to the obviousness rejection of claim 2 over Jennings and Dorenbosch. Therefore, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 68.

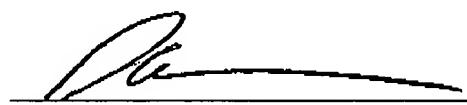
CONCLUSION

In view of the defective obviousness rejection of base claims over Jennings and Dorenbosch, it is respectfully submitted that obviousness rejections of dependent claims over Jennings, Dorenbosch, and other references have also been overcome.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (SHL.0270US).

Respectfully submitted,

Date: 4/19/2007


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